Running Head: Embedding Prompts in the IFSP
Can Embedding Prompts in the IFSP Form Improve the Quality of IFSPs Developed?
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## Abstract

The purpose of this study was to determine in what ways the quality of individualized family service plans (IFSPs) would be affected by adding written prompts to an IFSP form and instruction manual. Two IFSPs were collected from 94 service coordinators before and after adding written prompts to the IFSP form and manual targeting three areas: (a) recording family routines, (b) recording families' priorities for emotional, material, and informational support, and (c) connecting routines and priorities to outcomes and procedures. Results of multivariate analyses of variance (MANOVA) for repeated measures indicated that the quality of IFSPs improved statistically significantly after document revision. Follow-up univariate tests showed statistically significant improvement in 8 of 12 indicators of IFSP quality.

Can Embedding Prompts in the IFSP Form Improve the Quality of IFSPs Developed?

Every child who qualifies for early intervention services funded by Part C of the Individuals with Disabilities Education Improvement Act (IDEA, 2004) is entitled to a team-developed plan for services, called an Individualized Family Service Plan (IFSP) (34CFR§§ 303.340-303.346). Although IDEA requires that service plans contain certain components, the manner in which states choose to include these components is discretionary. State IFSP forms vary widely, but all have written prompts to ensure that the federally-required components of the plan are present. See NECTAC (2008) for examples of IFSP forms and guidance documents. These required components include a statement of the child's functional abilities; family priorities, strengths, resources, and concerns; outcomes for the child and family, including those for transition; and procedures, services, timelines, and criteria for achieving selected outcomes (34 CFR § 303.344). Studies indicate that nearly all IFSPs contain these required components (Bradley, Jung, & Sampson, 2007; Jung & Baird, 2003; Jung, Sampson, Bradley, & McWilliam, 2006). But while legal completeness of IFSPs has been an area of strength, the quality of these written plans remains in question.

Nearly all state early intervention systems have struggled with the quality of IFSPs, and many have used a variety of strategies such as workshops, conference sessions, websites, guidance documents, technical assistance systems, and mentors to improve the quality of service planning (NECTAC, 2008). Despite these efforts, early intervention administrators and researchers alike have found that service plans are persistently lacking. IFSP teams have struggled with writing outcomes that are measurable and understandable to all team members; service plans often have reflected professionally-driven outcomes that are unrelated to family priorities and concerns; and procedures described in service plans frequently have given the impression that providers will be

delivering hands-on direct intervention that is incompatible with family routines (e.g., Bailey, Winton, Rouse, & Turnbull, 1990; Bradley, Jung, & Sampson, 2007; Bruder et al., 1997, Boone et al., 1998; Jung & Baird, 2003; McWilliam et al., 1998).

The question remains then: why has the quality of IFSPs seem to improve so little over time? Do providers need a particular type of support in order to develop high-quality plans? Are there policies that affect the quality of IFSPs? How do systems support professionals' use of current recommended practice in their service planning?

One challenge to answering these questions is that states' efforts to improve service planning most often include *combinations* of strategies. Although putting into place multiple strategies to support improvement in practice is certainly practical, and studying the effects of groups of integrated strategies is valuable, this package approach makes understanding the effects of any *single* strategy impossible. Studying the effects of a single strategy can provide important insights that cannot be gleaned from studies of combinations of strategies. Furthermore, because the cost of strategies varies widely, such understanding could prove useful to programs as they make professional development and budget decisions. Clearly, any evidence that supports a strategy that a) has a *low-cost*, b) a *high impact*, and c) addresses an area of practice in which a *large proportion of professionals* struggle, would be exceedingly useful to the field.

One low-cost strategy some states and programs have used for improving IFSP quality is the crafting of an IFSP *form* and instructions in such a way that not only facilitates the presence of the required components, but also increases the likelihood that the components are written in a family-centered fashion. Many states have revised their IFSP form and instructions in recent years (NECTAC, 2008). Although IFSP form revision is certainly not a new or unusual strategy, to date no published studies have examined the effects of this strategy on the quality of service planning.

The purpose of this study was to determine in what ways targeted revisions to the IFSP form and instruction manual could affect the quality of plans developed by IFSP teams. In particular, will IFSPs score higher on indicators of quality when developed using an IFSP form and instruction manual that includes prompts in three areas: (a) recording family routines, (b) recording families' priorities for emotional, material, and informational support, and (c) connecting routines and priorities to outcomes and procedures?

# Method

# **Participants**

Participants in this study were 94 service coordinators in Kentucky's Early Intervention System (KEIS) who each provided two IFSPs, one before and one after revisions to the IFSP form. At the time of data collection, Kentucky had 255 service coordinators, and all were invited to participate. Ninety-four service coordinators responded by completing a survey and returning an IFSP at both data points. Service coordinators in this sample ranged in experience from 7 months to nearly 10 years (M = 53.02 months, SD = 43.16) and had degrees of varying levels (associate's degree, n = 4; bachelor's degree, n = 53; master's degree, n = 31) with majors in education (e.g., special education, elementary education) (n = 19), related fields (e.g., psychology, social work, occupational therapy) (n = 48), and unrelated fields (e.g., humanities, political science) (n = 19). All service coordinators in Kentucky were "dedicated;" that is, service coordinators did not provide any direct early intervention services to the families for whom they served as service coordinator.

## **Procedures**

# Measurement

Instrument. The 12-item IFSP Rating Scale (McWilliam & Jung, 2001) was used to score

the quality of IFSPs. The instrument is a revision of McWilliam's (1993) earlier version and assesses the extent to which family-centered practices are demonstrated in IFSPs. Items for the scale were selected based on studies of families' reactions to intervention plans (e.g., Able-Boone, Sandall, Loughry, & Fredrick, 1990; Summers et al., 1990), reflective writings about family-centered intervention plans (e.g., Bailey at al., 1986; Boone, McBride, Swann, Moore, & Drew, 1998; Johnson, McGonigel, & Kaufmann, 1989), curricula for developing family-centered intervention plans (Giangreco, Cloninger, & Iverson, 1993; McWilliam, 1992), and a review of the literature on family-centered practices in natural environments (Jung, 2001). Items on the rating scale are designed to measure the degree to which the following are present in the IFSP: (a) family-centered language, (b) active voice, (c) functional outcomes, (d) emphasis on strengths. (e) measurable outcomes. (f) routines-based intervention. (g) evidence-based strategies, (h) natural activity settings, (i) family implementation of intervention, (j) functional assessment information, (k) outcomes that are driven by family priorities, and (l) family priorities that are each addressed. Items on the IFSP Rating Scale were rated on a 5-point scale from 1 (descriptions of characteristics least consistent with family-centered practice) to 5 (descriptions of characteristics most consistent with family-centered practice). A summary of item names and descriptions of a 1, 3, and 5 rating for each are provided in Table 1.

Three sections of the IFSP are reviewed when scoring using the IFSP Rating Scale. Raters examine IFSP outcomes to score six rating scale items, IFSP procedures to score three items, and the present level of development portion of the IFSP to score three items. Because the number of outcomes and procedures varies between IFSPs, averaging a set of scores for the IFSP derives the final score for each rating scale item. For example, *writing* is scored for each outcome on an IFSP; then scores are averaged to arrive at a single score for the IFSP's writing.

For this sample of IFSPs, one item (*location*) was excluded from the analyses because data on this item were not available. In past studies *writing* was treated as a single item. But because the scores on outcome writing were markedly different from those on present level pages, *writing* was treated as two items. Estimates of inter-rater agreement, internal consistency, and component structure in previous studies (Bradley, Jung, & Sampson, 2007; Jung & Baird, 2003; Jung, Sampson, Bradley, & McWilliam, 2006; Jung & McWilliam, 2005) support the notion that quality of IFSPs can be reliably measured using the IFSP Rating Scale.

Rater training. Two raters were trained by the researcher to use the IFSP Rating Scale. First, IFSP Rating Scale indicators were explained to raters using the rating manual. Next, the researcher demonstrated the rating of an IFSP in its entirety with the raters, explaining in detail how the rating for each indicator was derived. The raters were then guided through scoring a second IFSP, with raters' determining scores, and explaining how each was chosen. The researcher provided corrective feedback on all discrepancies in scoring. Finally, the raters were each given two IFSPs, which had been rated by the researcher, to rate independently. After rating the two IFSPs, each was compared to the researcher's ratings. With 95% agreement on items the training was considered complete.

Rating procedures. To control for rater bias, raters were selected who were not employed in the field of early intervention, they were not involved in the process of IFSP form revision, the researcher did not rate any IFSPs used in analyses, and the pre and post intervention IFSPs were scored at the same time. In order to have information on interrater agreement, Rater #1 scored 94 IFSPs of which rater #2 scored 24 that were randomly selected. To calculate percent agreement, each individual rating was compared for the two raters. For example, to compare scores on the item "Outcome Writing," the ratings for each outcome were compared, not the overall mean

score for the item. There were 862 individual ratings on the 24 IFSPs scored by both raters. Of those, the raters agreed on 742, or an 86% agreement. Of the 120 disagreements, 81 were 1-point disagreements, 38 were 2-point disagreements, and 1 was a 3-point disagreement.

# Form Revision

A 14-person sub-committee of the state Interagency Coordinating Council (ICC), led by the researcher, was charged with revising the state IFSP form and corresponding instruction manual. The sub-committee consisted of parents, providers, university personnel, technical assistance providers, and lead agency personnel. The committee reviewed the existing IFSP form and determined areas of the form that might be improved to prompt more family-centered planning. The committee drafted a revised IFSP form and presented it to groups of providers throughout the state for comment. The committee reviewed each comment and arrived at consensus on a revised IFSP form to present to the state's ICC and lead agency for approval. The IFSP instruction manual, which was also revised, provided guidance on how to complete the IFSP and included narrative for completing the form and examples of each component. The IFSP form and instructions that were ultimately approved and implemented by the lead agency included many revisions, modeled in part after McWilliam's (1992) Routines-based Interview (RBI). The most significant changes fit within three prompt categories; (a) recording family routines, (b) recording families' priorities for emotional, material, and informational support, and (c) connecting routines and priorities to outcomes and procedures. These prompts were not unique, as they have each been used in other state's forms and guidance materials (NECTAC, 2008). Additional detail about the prompt categories is discussed below.

The revised IFSP included a new page for recording the results of a family interview on daily routines. This page and corresponding instructions prompted teams to list family routines;

describe the routines in terms of the child's engagement, independence and social relationships; and record family's satisfaction with routines. There was a similar page for childcare routines to be used when applicable.

The revised IFSP and instruction manual included prompts on two pages for identifying family' priorities for information, emotional support, and materials. The prompts on the first included open-ended questions as well as a checklist of potential areas of support for families to consider. The second page prompted teams to generate a list of family priorities.

Prompts in several areas of the IFSP form were added to connect routines, priorities, and outcomes. The page for family priorities included written prompts for using the results of the routines-based interview and discussion of additional priorities to generate the list of priorities. A column on this page prompted teams to assign rankings to the priorities in order of importance to the family. The outcomes pages included a prompt to record the number of the corresponding family priority for each outcome. The instruction manual was revised to include language for guiding teams in connecting these components of the IFSP and included multiple exemplars of outcomes and procedures. *Data Collection* 

Pre-intervention data were collected at seven regional service coordination meetings over a 3-month period conducted by the lead agency for Part C. At the meetings, service coordinators were asked to complete a demographic survey and submit IFSPs they had completed within the previous 3 months. Employees of the lead agency for Part C assigned each service coordinator a participant code and coded the submitted IFSP and demographic survey. At the conclusion of the meeting, each service coordinator was given a blank, revised IFSP form with the participant code so that IFSPs submitted before and after intervention could be paired by service coordinator.

Service coordinators were invited to participate in the study by using the coded IFSP at the

next IFSP meeting for the same family. Although the meetings for regions occurred at different times across a 3-month time period, because IFSPs are reviewed at 6-month intervals, the time between the first data point and second point was 6 months for all service coordinators. Because service coordinators' names and contact information were not available to the researcher, only general reminders to all service coordinators were provided. Ninety-four service coordinators participated by submitting a pre and post-intervention IFSP, yielding a total of 188 IFSPs for the study. *Data Analysis* 

Descriptive statistics were generated for scores before and after IFSP form revision, and Pearson correlations were used to understand the relationships between IFSP Rating Scale items. A repeated-measures multivariate analysis of variance (MANOVA) procedure was conducted to investigate main effects of IFSP form on overall service plan quality as measured by scores on the IFSP Rating Scale. In this analysis there was one within-subject factor (IFSP Form) with two levels: (Form 1 and Form 2). To clarify a significant difference in the MANOVA analysis, follow up univariate ANOVAs were generated to examine change in individual items. Because twelve univariate ANOVAs were computed, a Bonferroni correction was applied. The Bonferroni correction indicated that a p-value of .004 should be used to maintain an actual Type I error rate at p <.05. Finally, to present item change visually, a graph representing 95% confidence intervals for mean scores before and after form revision was generated. All analyses were conducted using SPSS 16.0 (2007). Results

Means, standard deviations, and confidence intervals for scores before and after form revision are included in Table 2. Table 3 presents the Pearson correlations of IFSP Rating Scale scores for the 195 IFSPs scored before form revision. The multivariate main effect for IFSP form

revision was statistically significant (Wilks = .203, F(12, 69) = 22.628, p < .001, partial  $\eta^2 =$  .80). Eight of the 12 follow-up univariate tests of individual IFSP items also proved statistically significant. The eight items that changed each improved after the IFSP form was revised. These included *writing*, *active*, *necessity*, *specificity*, *match outcome*, *family's role*, *outcomes with concerns*, *and present level functionality*. Multivariate and univariate results for each item are presented in Table 4. Figure 1 presents 95% confidence intervals for each IFSP Rating Scale item before and after IFSP form change.

# Discussion

Results of this study indicate that merely revising the IFSP form and written instructions to include targeted, family-centered prompts improved the quality in service plans that teams developed. Although significant improvement was found in 8 of 12 items measured, three items (i.e., active, specificity, and context appropriateness) remained far below an acceptable criterion. This suggests that though revision to the IFSP form may improve quality, it is not a substitute for high quality professional development and technical assistance, particularly in the areas of routines-based interventions and describing outcomes. Change in indicators is discussed below by three IFSP sections: outcomes, procedures, and present level of development.

#### IFSP Outcomes

Six of the 12 IFSP Rating Scale items address how well teams develop IFSP outcomes (outcomes writing, active, necessity, specificity, outcomes with concerns, and concerns with outcomes). In this study, outcomes were written with more family-centered language and with more specific behaviors described. The IFSPs in this sample scored very low in specificity of outcomes before form revision. Although specificity improved significantly, many of the outcomes written using the revised form were not measurable and remained far below criteria.

Outcomes scored high on the measure of necessity before form revision. After revision, scores were significantly higher, indicating that the form change led to outcomes that were either necessary for development or for better functioning within a routine. When compared to results of Jung and Baird's (2003) study of a 3-day training on IFSP development, the IFSPs in this study improved to a similar degree in the areas of using family-centered language, using active voice, and selecting functional outcomes. IFSPs in this study did not improve on *specificity* to the extent IFSPs did in the Jung and Baird (2003) study.

The item *outcomes with concerns* was the item most changed after the IFSP form revision. Before the IFSP was revised many outcomes were driven by professionals (e.g., "PT goals," "Speech goals"). The revised IFSP form prompted teams to record the number of the priority or concern families listed earlier in the document for each outcome. After this revision, nearly all outcomes were clearly connected to priorities or concerns expressed by families. This sample of service coordinators demonstrated greater improvement on this item than the sample of service coordinators in Jung and Baird's (2003) study. The scores on *outcomes with concerns* in this sample were lower before intervention (M=3.1, SD = .64) than that of the previous study (M = 4.1, SD = 1.1), yet the scores post intervention in the two studies were nearly identical, with 96% of outcomes in both studies linked to family priorities or concerns.

#### IFSP Procedures

Three items on the IFSP Rating Scale (i.e., context appropriate, match outcome, and family's role) were scored by reviewing the procedures listed in the IFSP. Although scores for match outcome were very high before the form revision, with a nearly perfect score mean and small standard deviation after revision, it is evident that almost all procedures on IFSPs completed after IFSP revision clearly related to the outcomes for which they were developed.

Family's role was one of the items that was most improved by the IFSP revisions, with scores indicating that teams planned for families to be implementers of intervention to a much greater extent after revisions.

Criteria for *context appropriateness* require that participants refer to family routines as a source of learning opportunity within the procedures section of the IFSP. Scores remained low on this item after IFSP revision, indicating that prompts to record family routines and guidance and examples within the written instruction manual were not sufficient to support the development of routines-based procedures. This was the least improved of the items that had a mean score of less that 3.0 before form revision. Results for *context appropriateness* contrast from Jung and Baird's (2003) results in which IFSPs improved statistically significantly on this item, t(117) = 3.447,  $\Delta$ =.71. Perhaps a prompt within the procedures section could increase the use of routines-based procedures, or this may be an item for which quality cannot be significantly affected with targeted prompts in the form and written instructions.

IFSP Present Level of Development Similar to match outcome and

necessity, scores for all items that measured quality of service plan by examining the present level of development section were very high before the IFSP was revised. Although scores were amongst the highest before form revision, those for present level functionality were higher and more consistent using the new form. These ratings indicate that the wording providers used to describe children's developmental status was more related to skills needed in everyday routines after the IFSP form was revised.

#### Limitations

The primary limitation to this study is the lack of availability of a control group. The quality of IFSPs could have possibly improved during the 6 months between data collection

points one and two without the IFSP revisions. Also, though participants did not know what the rating scale items were, they knew they were participating in a study of improving IFSPs. It is possible that they demonstrated improvement on the IFSP they submitted, but did not improve on other IFSPs. Further study with a control group is necessary to support that meaningful change can occur as a result of this intervention.

A second limitation of this study is that only one state's IFSPs were evaluated. For this reason, results of this study cannot answer comparative questions about the relative quality of various state and programs' IFSP forms or guidance documents. What is known is that after revisions to *this* form *these* IFSPs improved. What is not known, however, is if this particular revised form and instruction manual are more conducive to high quality planning than those of other states or programs. Therefore, these results should not be interpreted to suggest that the revised IFSP form in this study is better than other IFSP forms. Rather, these data support the use of targeted, family-centered prompts within the IFSP form and written instructions to improve the quality of plans. To understand more about the relative merits of IFSP forms, future research might examine larger numbers of IFSP forms and guidance documents and quality of planning across multiple programs and states.

Finally, although improving the quality of service planning is important, it cannot be assumed that an improvement in the quality of plans results in an improvement in the quality of services. To answer that question, further research is needed to determine the relationship between quality of IFSPs and service delivery practices.

## Conclusion

After including prompts for family-centeredness, IFSPs in this study were written using more family-centered language and were more functional, clear, responsive to family priorities,

and recognized families as implementers of intervention to a greater extent. Of major importance is that not only did service plans improve on 8 of 12 indicators, but the improvement on 5 indicators in this study was similar to (i.e., *outcome writing, active, necessity, specificity*) or greater than (*outcomes with concerns*) improvement of the same items in a previous study of the effects of a much more costly 3-day training on IFSP development (Jung & Baird, 2003). These results are particularly noteworthy given the relative ease of implementation and low cost of document revision.

The results indicate that adding targeted prompts to the IFSP form may indeed be an effective, low-cost strategy for improving *some portions* of service planning. The results also suggest that document revision was not effective in changing other service planning practices that involve a deeper understanding of family centered supports. However, if revising the IFSP form can sufficiently improve *elements* of these plans, more costly and time-intensive professional development can be reserved to effectively target the areas that still need improvement after form-embedded prompts are implemented. This study, for example, indicates that any additional efforts *with this sample* that focuses on writing strategies that match outcomes, writing outcomes that match concerns, or any portion of the present level of development page would not be the best use of professional development resources. Rather, for this sample, resources might be best used in supporting the practice of writing specific outcomes and procedures that maximize natural learning opportunities.

In addition to the need to study service planning with other groups of participants, results of this study suggest the potential unique benefit of investigating low-cost, high-impact strategies to improve practice. Similar to this study, new studies might a) identify key areas of practice with which *most professionals* struggle, b) identify promising *low-cost* strategies to improve practice,

and c) study the effects of each strategy *separate* from other professional development or technical assistance when possible. Of equal importance to understanding which practices are effective is to learn of the *ineffectiveness* of any strategies, particularly those that cost more, require more time, or are more difficult to implement. In this way, those who are charged with designing professional development and support can make informed choices to maximize impact by balancing limited time and dollar resources with clear evidence on effectiveness.

## References

- Able-Boone, H., Sandall, S. R., Loughry, A., & Frederick, L. L. (1990). An informed, family-centered approach to Public Law 99-457: Parental views. *Topics in Early Childhood Special Education*, 10, 100-111.
- Bailey, D. B., Jr., Winton, P. J., Rouse, L., & Turnbull, A. P. (1990). Family goals in infant intervention: Analysis and issues. Journal of Early Intervention, 14, 15-26.
- Bailey, D. B., Simeonsson, R. J., Winton, P. J., Huntington, G. S., Comfort, M., Isbell, P., O'Donnell, K. J., & Helm, J. M. (1986). Family-focused intervention: A functional model for planning, implementing, and evaluating individualized family services in early intervention. *Journal of the Division for Early Childhood*, 10, 156-171.
- Boone, H. A., McBride, S. L., Swann, D., Moore, S., & Drew, B. S. (1998). IFSP practices in two states: Implications for practice. *Infants and Young Children*, 10(4), 36-45.
- Bradley, K.D., Jung, L.A., & Sampson, S.O. (April, 2007). *Applying Rasch measurement to validate the IFSP rating scale*. A paper presented at the American Educational Research Association Annual Meeting. Chicago, IL.
- Bruder, M. B., Staff, I., & McMurrer-Kaminer, E. (1997). Toddlers receiving early intervention in childcare centers: A description of a service delivery system. *Topics in Early Childhood Special Education*, 17, 185-208.
- Giangreco, M. F., Cloninger, C. J., & Iverson, V. S. (1993). *Choosing options and accommodations for children: A guide to planning inclusive education*. Baltimore: Brookes.
- Grisham-Brown, J., & Hemmeter, M. L. (1998). Writing IEP goals and objectives: Reflecting an activity-based approach to instruction for children with disabilities. *Young Exceptional Children*, 1(3), 2-10.
- Individuals with Disabilities Education Improvement Act of 2004, PL 108-446, 20 U.S.C. §§1400 et seq.
- Johnson, B. H., McGonigel, M. J., and Kaufmann, R. K. (1989). *Guidelines and recommended practices for the individualized family service plan*. Chapel Hill, NC & Washington, DC: NEC\*TAS and ACCH.
- Jung, L. A. (2001). Effects of service coordinator characteristics on the family centeredness of individualized family service plans. Unpublished doctoral dissertation, Auburn University, Auburn, Alabama.

- Jung, L. A., & Baird, S. M. (2003). Effects of service coordinator variables on individualized family service plans. *Journal of Early Intervention*, *25*, 206-218.
- Jung, L. A., & McWilliam, R. A. (2005). Reliability and validity of scores on the IFSP rating scale. *Journal of Early Intervention*, 27, 125-136.
- Jung, L.A., Sampson, S.O., Bradley, K., & McWilliam, R.A. (February, 2006). Applying Rasch measurement to validate the IFSP rating scale. A paper presented at the Biannual Conference on Research Innovations in Early Intervention, San Diego, CA.
- McWilliam R. A. (1993). *The IFSP Family-Centeredness Rating Scale*. Unpublished instrument, Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill.
- McWilliam, R. A. (1992). Family-centered intervention planning: A routines-based approach. Tucson, AZ: Communication Skill Builders.
- McWilliam, R., Ferguson, A., Harbin, G., Porter, D. M., & Vaderviere, P. (1998). The family-centeredness of individualized family services plans. *Topics in Early Childhood Special Education*, 18, 69-82.
- McWilliam, R. A., & Jung, L. A. (2001). IFSP Rating Scale. Unpublished instrument.
- National Early Childhood Technical Assistance Center (NECTAC) (2008). State examples of IFSP forms and guidance. Retrieved from http://www.nectac.org/topics/families/stateifsp.asp
- SPSS, Inc. (2007). SPSS® 16.0 [Computer software]. Chicago: Author.
- Summers, J. A., Dell'Oliver, C., Turnbull, A. P., Benson, H. A., Santelli, E., Campbell, M., & Siegel-Causey, E. et al. (1990). Examining the individualized family service plan process: What are family and practitioner preferences? *Topics in Early Childhood Special Education*, 10, 78-99.

Table 1 Summary of IFSP Rating Scale Scoring Guidelines

Indicator	IFSP Rating Scale								
	1	2	3	4	5				
Writing	Technical jargon or obscure, complicated language		No technical terms or professional jargon, but statement is unclear		Language is clear and contains no technical jargon				
Active	Passive voice		Active voice/passive outcome		Active voice				
Necessity	Not likely necessary for development		Not clear whether the outcome was necessary		Necessary for development or to support a family routine				
Specificity	Outcome is vague		Outcome is clear, but criteria or conditions are not provided		Outcomes is clear and measurable				
Context Appropriateness	Difficult to do in a natural context		Could be easily use a natural learning opportunity, but none suggested		Routines or natural activities suggested as the context for learning				
Match Outcome	Procedures did not seem related to the outcome		Procedures indirectly addressed the outcome		Procedures directly supported the outcome				

Location	Segregated setting	Both types of settings	Natural environments only			
Family's Role	Carried out exclusively by professionals	Implied participation from the natural caregivers	Natural caregiver clearly the implementer			
Concerns with Outcomes*	20% of priorities or concerns addressed by at least one outcome	60% of priorities or concerns addressed by at least one outcome	100% of priorities or concerns addressed by at least one outcome.			
Outcomes with Concerns*	20% of outcomes have a corresponding concern or priority	60% of outcomes have a corresponding concern or priority	100% of outcomes have a corresponding concern or priority			
Present Level Positiveness	Strengths not listed	More information about needs than strengths	At least as many words to describe strengths as needs			
Present Level Functionality	Primarily consisted of tasks from the instrument	Instrument tasks as well as functional information	Included only functional information			

Note. With the 2001 revisions of the scale the items present, target date, and judgment were dropped, and the items outcomes with concerns and concerns with outcomes were added. There was no variability in scores on present, and target date. Judgment was determined to lack construct validity. Information on the item location was not available in this sample.

<sup>\*</sup>Concerns with outcomes and outcomes with concerns are exact calculations. The percentage of match is calculated for each and divided by 20 for a resulting score that fits the 5-point scale.

Table 2

Multivariate and Univariate Results for Effects of IFSP Form on IFSP Rating Scale Scores

Within-Subjects Test (Form)	Measure	df	Mean Square	F	p	Partial η <sup>2</sup>
Multivariate		$df_{\rm B}$ $df_{\rm W}$				
		12 69		22.628	.000 <sup>a</sup>	.80
Univariate	Outcomes with Concerns	1.0	.00	203.11	.000 <sup>b</sup>	.72
	Family's Role	1.0	122.0	76.60	.000 <sup>b</sup>	.49
	Specificity	1.0	1.4	30.56	.000b	.28
	Active	1.0	6.8	27.71	.000b	.26
	Necessity	1.0	22.0	24.64	.000 <sup>b</sup>	.24
	Writing	1.0	27.1	20.75	.000 <sup>b</sup>	.21
	Match Outcome	1.0	49.1	19.79	.000 <sup>b</sup>	.20
	Present Level Functionality	1.0	2.2	6.10	.016 <sup>b</sup>	.07
	Present Level Writing	1.0	.1	2.11	.150 b	.03
	Context Appropriate	1.0	8.1	1.32	.255 b	.02
	Concerns with Outcomes	1.0	1.4	.00	.958 b	.00
	Present Level Positive	1.0	2.2	.36	.547 b	.00

a. Computed using Wilks' □

b. Computed using Greenhouse-Geisser  $\square$ 

Table 3 Descriptive Statistics for IFSP Rating Scale Scores Before and After Form Revision

	Scores	Form Rev	ision	Scores After Form Revision				
		95% Confidence Interval					95% Cor Inter	
Measure	Mean	SD	Lower	Upper	Mean	SD	Lower	Upper
Writing	2.9	1.3	2.6	3.2	3.7	1.6	3.4	4.1
Active	2.0	1.1	1.8	2.3	3.1	1.8	2.7	3.5
Necessity	4.2	.5	4.1	4.3	4.6	.5	4.5	4.7
Specificity	2.1	.9	2.0	2.3	2.9	1.2	2.6	3.2
Context Appropriate	2.8	1.2	2.6	3.1	3.0	1.1	2.8	3.3
Match Outcome	4.5	.6	4.3	4.7	5.0	.3	4.9	5.0
Role	3.1	.9	2.9	3.3	4.2	.9	4.0	4.4
Outcomes with Concerns	3.1	1.0	2.9	3.3	4.8	.6	4.7	5.0
Concern with Outcomes	4.6	1.0	4.4	4.8	4.6	1.0	4.4	4.8
Present Level Writing	4.2	.8	4.0	4.4	4.4	.7	4.3	4.5
Present Level Positive	4.9	.4	4.8	5.0	4.8	.4	4.8	4.9
Present Level Functionality	4.5	.7	4.3	4.6	4.7	.4	4.6	4.8

Table 4

Pearson Correlations for IFSP Rating Scale Items

	1	2	3	4	5	6	7	8	9	10	11	12
1. Outcome Writing		.64**	.04	.85**	.16	.22*	.24*	.02	05	12	.01	07
2. Active	.62**	:	.10	.74**	01	.16	.07	.05	05	00	.04	03
3. Necessity	.04	.17*		.02	.12	.31**	.12	.27*	.01	03	.05	05
4. Specificity	.76**	· .78**	.20**	:	.15	.20	.20	.11	.01	02	.07	.03
5. Context Appropriate	.30**	06	08	.11		.22*	.55**	.09	.02	.13	.03	.15
6. Match Outcome	- .25**	04	.18*	15*	.01		.31**	05	.35**	<b>'</b> 09	.04	13
7. Family's Role	.20**	11	.08	.02	.66**	.01		.15	.03	10	.06	.00
8. Outcomes with Concerns	.07	.05	.24**	.09	.02	02	.12		.00	.07	.12	.14
9. Concerns with Outcomes	.01	09	.00	07	.01	06	01	.31**	•	.11	.07	.20
10. Present Level Writing	17*	12	.10	16*	.08	.43**	.15*	.01	.03		.21	.81**
11. Present Level Positive	: .13	.06	.03	.16*	.10	06	.04	.03	.10	.06		.38**
12. Present Level Functionality	11	05	.12	05	.08	.54**	.12	.02	.03	.76**	.21**	k

<sup>\*\*</sup> Correlation is significant at the 0.01 level.

Note: Coefficients in the lower triangle represent correlations of scores before IFSP revision (N = 195), and those in the upper triangle represent correlations of scores after IFSP revision (N = 94).

<sup>\*</sup> Correlation is significant at the 0.05 level.

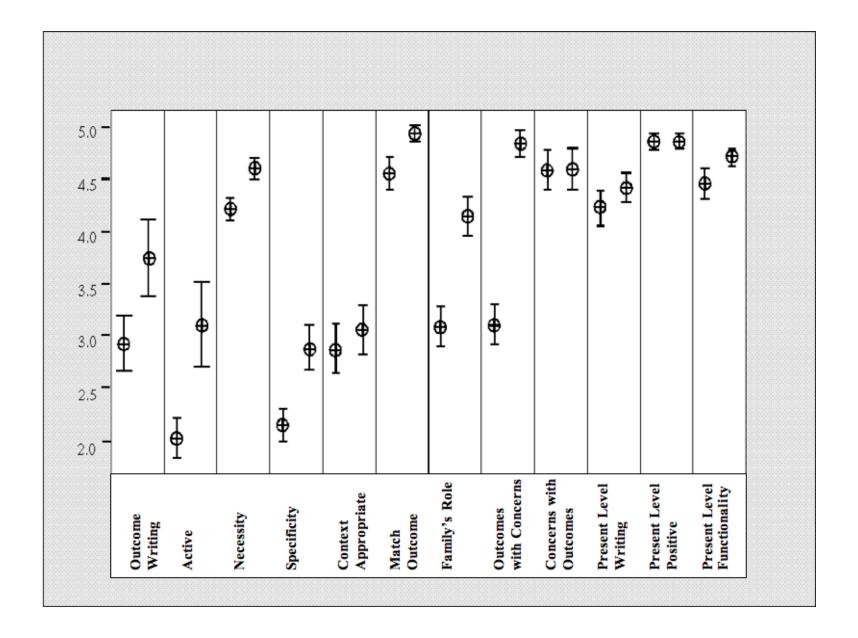


Figure 1. 95% Confidence Intervals for IFSP Rating Scale Scores Before and After Form Revision (N = 81).